

We claim:

1. A network switch comprising:
 - a plurality of input ports that receive data packets;
 - an external address resolution interface connected to at least one of said plurality of input ports, said external interface externally transmitting said data packets for processing, and receiving said data packets after processing;
 - a memory management unit connected to said external interface; and
 - a plurality of output ports connected to said memory management unit.
2. The network switch as recited in claim 1 wherein said external address resolution interface is a high-speed external interface.
3. The network switch as recited in claim 1 wherein said external address resolution interface is an address resolution gigabit interface.
4. The network switch as recited in claim 1 further comprising:
an external ARL is connected to said external interface.
5. The network switch as recited in claim 1 further comprising:

an external address resolution chip connected to said external interface.

6. A method of processing a data packet in a network switch comprising the steps of:

receiving a data packet in an input port;

transmitting said data packet from said input port over an interface to an external module for address resolution;

processing said packet in said external module;

transmitting said packet from said external module to said interface;

receiving said data packet in said interface from said external module;

transmitting said data packet from said interface to a memory management unit;

and

transmitting said data packet from said memory management unit to an output port.

7. A network switch comprising:

an input port receiving means for receiving a data packet in an input port;

an input port transmitting means for transmitting said data packet from said input port over an interface to an external module for address resolution;

a processing means for processing said packet in said external module;

an external module transmitting means for transmitting said packet from said external module to said interface;

an interface receiving means for receiving said data packet in said interface from said external module;

an interface transmitting means for transmitting said data packet from said interface to a memory management unit; and

a memory unit transmitting means for transmitting said data packet from said memory management unit to an output port.